



California Public Employees' Retirement System

California Public Divest from Sudan Act Annual Legislative Report

December 31, 2011



**California Public Employees' Retirement System
Sudan Act - Annual Legislative Report
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Executive Summary

1. This Legislative Report sets out CalPERS implementation of the Sudan Act during 2011. This requires that CalPERS identify, monitor, and ultimately divest from companies with business activities in Sudan, unless exempt on humanitarian grounds, subject to the plan's fiduciary duty which requires that risks and returns take primacy.
2. Since the 2010 Legislative Report was filed, CalPERS has continued to actively engage companies as required by the Sudan Act and tracked significant progress towards portfolio companies withdrawing from Sudan.
3. During the period covered, additional companies announced they were curtailing their activities in Sudan or were making significant progress towards withdrawal.
4. During the period covered, CalPERS divested from three companies operating in Sudan that failed to take substantial action as defined by the Sudan Act: Dongfeng Motor Group, El Sewedy Cables, Mangalore Refinery & Petrochemicals Ltd. New investments in these companies will be blocked as well. The decision to divest these companies was taken by the CalPERS Investment Committee following a detailed process of identification, engagement and fiduciary analysis by CalPERS staff in compliance with the Sudan Act. At earlier stages in CalPERS compliance with the Sudan Act, the fiduciary analysis concluded that divestment would subject the fund to additional risk and costs. As the number of companies subject to the Sudan Act has diminished, so too have the potential risk and costs of divestment. This enabled the Investment Committee to conclude that CalPERS could now divest these shares without breaching its fiduciary obligations.
5. CalPERS will continue to identify companies potentially subject to the Sudan Act, to notify them of the law's provisions, and call for their withdrawal from the country unless continued business activity is warranted on humanitarian grounds.

Introduction

This fifth report to the Legislature is provided by the California Public Employees' Retirement System (CalPERS) under the requirements of AB 2941 (Chapter 442), Government Code section 7513.6, commonly known as the Sudan Act.

CalPERS is the largest public pension plan in the United States, responsible for over \$228 billion in global assets, which are invested to provide retirement and health benefits for over 1.6 million Californians. The CalPERS Board has sole and exclusive responsibility to administer the system in a manner that will assure prompt delivery of benefits to its participants and their beneficiaries. The assets of the system are trust funds that must be held for the exclusive purposes of providing benefits to participants in the retirement system and their beneficiaries and defraying reasonable expenses of administering the system.

Implementation of the Sudan Act

CalPERS has implemented the requirements of the Sudan Act throughout the reporting period and from the time the legislation became effective, January 1, 2007.

This report charts significant progress towards meeting the objectives of the Sudan Act, which are to ensure that companies curtail or cease business operations in the country, unless the companies are exempt on humanitarian grounds. The details are set out in the table which follows.

Implementation of the Sudan Act is kept under review by the CalPERS Senior Executive Corporate Governance Working Group, which includes the President of the Board of Administration, the Chief Executive Officer, the Chief Investment Officer, Chief Operating Investment Officer, the General Counsel, and heads of Government Affairs, External Affairs and Governance.

Furthermore, the CalPERS Board issued a Position Statement in May 2006 which supports the Sudan Act which followed, stating that "companies that do business in Sudan may thereby be unwittingly furthering or condoning the egregious human rights violations that are occurring" and signaling its intention to engage with companies on the issue.

CalPERS continues to participate in the UN Leaders Summit, which has developed a resource for companies and investors entitled "Guidance on Responsible Business in Conflict-Affected and High-Risk Areas" which will further inform engagement with companies operating in Sudan.

CalPERS is an active participant in the Sudan Engagement Group (SEG), which is coordinated by the United Nations Principles of Responsible Investment (PRI). In March 2010, CalPERS was represented by its emerging markets corporate governance manager, Cartica, in Sudan for meetings jointly organized by the PRI in collaboration

with the United Nations Global Compact (UNGC) and the Global Compact Local Network in Sudan. The meetings included local and international companies, non-governmental organizations (NGOs), community representatives, diplomats, international experts and the Government of National Unity. In addition, the PRI Initiative and the UNGC organized an event on “Responsible Investment and Responsible Business Practices in Conflict Affected Countries.” This event was an opportunity for representatives of companies, institutional investors, civil society and government to discuss the role of the private sector in fostering peace and development in post-conflict situations. In May 2011, the SEG issued a press release stressing the importance of the Sudanese people moving forwards towards peace following the referendum vote.

CalPERS strives to continue to be informed of the evolving status of Sudan’s referendum vote results. The 2005 Sudanese Comprehensive Peace Agreement (CPA) provided the people of Southern Sudan a choice to continue within one country or to separate. In January 2011, the people of Sudan overwhelmingly voted for separation. On July 9th, 2011, with the recognition of the Government of Sudan, the Republic of South Sudan was declared independent. The independence of South Sudan brings many opportunities and challenges in the future as Sudan and South Sudan pursue their relationship with each other and the international community. Following the Republic of South Sudan’s declaration of independence, the United Nations General Assembly admitted South Sudan as the 193rd member of the United Nations.

The United States announced its formal recognition of the Republic of South Sudan, Africa’s 54th nation, as a sovereign and independent state, and began to establish full diplomatic relations with the country. President Obama nominated the first U.S. ambassador to South Sudan Deputy Assistant Secretary of State Susan Denise Page, who served as a legal advisor to the Sudanese mediation process and helped draft provisions of the 2005 CPA. Senators of both parties expressed strong support for her nomination and confirmed the appointment.

These activities provide support for CalPERS full implementation of the Sudan Act.

Requirements of the Sudan Act

The Sudan Act sets out a number of requirements, as follows:

The legislation requires that CalPERS identify companies with business operations in Sudan, as defined in the Sudan Act, or that provide revenue to the government of Sudan.

Under the Sudan Act, a company has business operations in Sudan if the company meets either of the following criteria:

1. The company is engaged in active business operations in Sudan. If that company is not engaged in oil-related activities, that company also lacks significant business operations in eastern, southern, and western regions of Sudan.

2. The company (A) is engaged in oil-related activities or energy or power-related operations, or contracts with another company with business operations in the oil, energy, and power sectors of Sudan, and the company failed to take substantial action related to the government of Sudan because of the Darfur genocide, or (B) the company had demonstrated complicity in the Darfur genocide, or (C) the company supplies military equipment within the borders of Sudan.

“Business operations” is defined in the Sudan Act to mean “maintaining, selling, or leasing equipment, facilities, personnel, or any other apparatus of business or commerce in Sudan, including the ownership or possession of real or personal property located in Sudan.”

Identification

The process for researching and identifying the companies that have business operations in Sudan has been developed with great care and attention to detail. For this report, CalPERS utilized external third party resources including the PRI Sudan Engagement Group for the initial identification of companies subject to the Sudan Act.

Notification

Once identified, CalPERS has provided timely and full notification to each company, setting out the provisions of the Sudan Act, and seeking a substantial response which can be properly assessed.

To ensure the highest level of engagement, letters have been couriered to the most senior board member of each company, for example, the Chairman, CEO or President. The critical provisions are those in the Sudan Act that relate to exemption through boycotting the government, curtailing business, and selling company assets, equipment and property. CalPERS has also carefully considered petitions for exclusion on grounds of humanitarian activity and ensured that the intention of the Act has been firmly applied.

Staff actively pursue a substantive response to these corporate engagements, for example by identifying parent companies where decisions will be made, and if need be, making use of translating services to ensure clear communication.

Determination

Following the communication with identified companies, staff makes a determination of the companies’ status under the Sudan Act. The company’s response is analyzed by CalPERS staff to determine the applicability of the Sudan Act’s provisions. Where company activity is deemed to be subject to the Sudan Act, the determination includes an assessment of whether the company is taking substantial action to withdraw, or making substantial progress towards this. An additional consideration is whether a company is exempt on humanitarian grounds.

In its commitment to fulfill the provisions of the Sudan Act, CalPERS has worked diligently as an individual investor and collaboratively with CalSTRS to go beyond letter writing. Engagement with companies is carried out at the highest level.

Divestment Policy

The CalPERS Investment Committee has adopted a specific policy on the topic of divestment. This policy builds on the concepts of fiduciary duty and some of the possible implications of divestment on these responsibilities. The policy defines instances when CalPERS will undertake divestment as follows:

1. CalPERS will sell targeted company investments or refrain from making them to the extent investment in the targeted company is imprudent and inconsistent with fiduciary duties.
2. CalPERS will comply with federal laws requiring divesting, if any.
3. To the extent required by law and consistent with fiduciary duties, CalPERS will comply with constitutional California state laws that require divesting.

Fiduciary analysis

The Sudan Act requires that CalPERS divest its shares in those companies that have not provided evidence of exemption from the Sudan Act's provision, within 90 days of being notified. However, the Sudan Act specifies that this does not "require the board to take action as described...unless the board determines, in good faith, that the action...is consistent with the fiduciary responsibilities of the board as described in Section 17 of Article XVI of the California Constitution." (Gov Code §7513.7(k).)

Hence, the Sudan Act requires that divestment be carried out consistent with the California Constitution which determines that the boards of CalPERS and CalSTRS to execute their actions with a singular focus on the purpose of providing benefits to participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system.

Upon the determination that companies are subject to the divestment provisions of the Sudan Act, detailed analysis of the potential risk and return impact of divestment has been completed. This type of fiduciary analysis has been completed regularly by both internal CalPERS staff and independent external consultants.

The most recent version of the fiduciary analysis was completed in March 2011 by Wilshire Associates (Attachment 1), CalPERS general pension consultant. This analysis contemplated the divestment impact of eight companies doing business in Iran (five companies) and Sudan (three companies) valued at approximately \$160 million. CalPERS once had up to \$2 billion invested in 47 companies believed to be conducting business operations in the two countries targeted by California divestment laws.

Following this review, it was determined that removal of the now relatively small positions in three companies from CalPERS portfolio that were deemed unresponsive or failed to take substantial action pursuant to the Sudan Act would not have a material impact on CalPERS objective to achieve long-term, sustainable, risk-adjusted returns.

In prior years, CalPERS fiduciary analysis indicated that significant explicit trading costs would be incurred if CalPERS were to divest its holdings in companies subject to the Sudan Act and that the resulting portfolio would have an increased level of risk relative to the underlying FTSE All World, All Capitalization benchmark used within the CalPERS global equity portfolio. Based on this review of the potential cost and risk impact of divestment and an analysis of its fiduciary responsibilities, CalPERS did not divest.

Liquidation

The Sudan Act requires the sale of any investments in companies subject to divestment within an 18 month time period from the point of such determination. CalPERS has completed liquidation of three companies subject to the Sudan Act in 2011.

The Sudan Act has specific reporting requirements, which are addressed as follows.

Reporting Requirement of Section 7513.6(i)(3) – Whether the Board has Reduced its Investments in any Companies Described in Section 7513.6(b) or (c) (“Covered Companies”)

CalPERS has fully divested from three companies which continue to have business activities in Sudan and were unresponsive to CalPERS engagement: Dongfeng Motor Group, El Sewedy Cables, Mangalore Refinery & Petrochemicals Ltd. New investments in these companies will be blocked as well.

Progress on Company Withdrawal from Sudan

The table that follows sets forth CalPERS current investment holdings in the non-US companies that have been identified as having business operations in Sudan, as defined by the legislation.

The progress on company withdrawal from Sudan or exemption from the Sudan Act is as follows:

1. (Table 1) CalPERS has divested from 3 companies pursuant to the Sudan Act.
2. (Table 2) CalPERS holds portfolio positions in 1 company that is under review as potentially subject to the Sudan Act.

3. (Table 3) CalPERS holds portfolio positions in 16 companies that continue to be monitored regarding Sudan activity, if any.

Conclusion

CalPERS continues to diligently implement the requirements of the Sudan Act. Through this process CalPERS has tracked significant progress in company withdrawal and reduction of activity in Sudan. In part, this reflects the growing geo-political risk in the country, but it also demonstrates a positive response to active shareowner engagement and economic sanctions.

CalPERS will continue to identify, monitor, engage with companies in the portfolio and review their status under the Sudan Act. Companies continue to withdraw, curtail operations or simply run down contracts. Others are deciding to not proceed with planned investments, even where this allows competitors to step in.

It is clear that the situation is changing rapidly; however, CalPERS will ensure its commitment to diligent compliance with this legislation will continue, that the Board is kept fully apprised of developments, and that staff are positioned to review our response as required.

TABLE 1
3 Companies Divested Pursuant to the Act

	<i>Company Name (Domicile)</i>	<i>Summary of Ties to Sudan</i>	<i>Summary of Changes From 2010</i>	<i>Shares Held by CalPERS 10/31/2011</i>	<i>Market Value (\$) of Shares Held by CalPERS 10/31/2011</i>
1	Dongfeng Motor Group Company Ltd. (Hong Kong)	<p>Dongfeng Motor Group includes DongFeng Automobile Co., an automobile manufacturer, whose military division is under investigation for violating the United Nations arms embargo against Sudan. In 2006, the United Nations Panel of Experts monitoring the Darfur arms embargo reported that it saw a shipment of green military trucks at Port Sudan in August 2005. It said that similar trucks were later seen on the grounds of the Sudanese Air Force in Darfur in October 2006. The panel commenced an investigation, which found that the Ministry of Finance and National Economy of Sudan had purchased 222 vehicles-212 military trucks of model EQ2100E6D and 10 chassis of model EQ1093F6D-from Dongfeng on behalf of the Ministry of Defense. Following the release of the report, Dongfeng failed to answer directly any inquiries regarding its sale of military vehicles to Sudan.</p> <p>In December 2007, Dongfeng Motor Group confirmed for MSCI that it sells products to customers in Sudan, but it said that it does not have any equity interest in companies there. It added that it supplied trucks to the Khartoum government under a contract approved by the Chinese government. On July 14, 2008, a BBC investigative program found Dongfeng Automobile Co's (a DongFeng Motor's subsidiary) military vehicles, whose plates and markings showed a post-embargo manufacture date, in the possession of a Darfur rebel group that had reportedly captured them from the Sudanese Armed Forces. Its markings, captured on film, show the truck was exported by China to Sudan in 2005, after the United Nations banned the transfer of military goods to Darfur. Aside from documenting the presence of these vehicles, witnesses confirmed that they had seen them used during a December 2007 attack on Sirba town in West Darfur.</p> <p>In a press release issued on November 18, 2008, the UN panel of experts denounced that the Sudanese government and rebel groups in Darfur have continuously and flagrantly violated the arms embargo from September 2007 to September 2008. The panel's report included photos of equipment reportedly from the Sudanese government that was</p>	In May 2011, the CalPERS Investment Committee approved divestment of shares in companies which continued to have activities in Sudan and was unresponsive to our engagement.	0	0

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TABLE 1
3 Companies Divested Pursuant to the Act

	<i>Company Name (Domicile)</i>	<i>Summary of Ties to Sudan</i>	<i>Summary of Changes From 2010</i>	<i>Shares Held by CalPERS 10/31/2011</i>	<i>Market Value (\$) of Shares Held by CalPERS 10/31/2011</i>
		manufactured after the 2005 embargo, including a Dongfeng Automobile military truck and 120 mm mortars and post-embargo ammunition found in the hands of the rebel Justice and Equality Movement.			
2	El-Sewedy Electric Co. (Egypt)	El-Sewedy Cables provides significant support to Sudan's electricity generating infrastructure. The company owns and operates a plant in Sudan that produces power transmission cables.	In May 2011, the CalPERS Investment Committee approved divestment of shares in companies which continued to have activities in Sudan and was unresponsive to our engagement.	0	0
3	Mangalore Refinery & Petrochemical Ltd. (India)	Mangalore Refinery is a majority-owned publicly traded subsidiary of the Indian Oil & Natural Gas Corporation Ltd (ONGC). According to international news sources, Mangalore Refinery itself is involved in oil-related projects in Sudan. According to Reuters in 2007, and the United News of India reported on Oct. 28, 2008, the company refined crude oil from Sudan that is exported to India. In total, the oil processed by Mangalore Refining makes up 15 percent of the total oil produced by ONGC in Sudan.	In May 2011, the CalPERS Investment Committee approved divestment of shares in companies which continued to have activities in Sudan and was unresponsive to our engagement.	0	0
			Category Total:	0	0

<p>TABLE 2 1 Company Under Review</p>					
	<i>Company Name (Domicile)</i>	<i>Summary of Ties to Sudan</i>	<i>Summary of Changes From 2010</i>	<i>Shares Held by CalPERS 10/31/2011</i>	<i>Market Value (\$) of Shares Held by CalPERS 10/31/2011</i>
1	JX Holdings (Japan)	<p>JX Holdings is the result of a merger between Nippon Oil Corporation and Nippon Mining Holdings. Nippon Oil Corp had previous involvement in Sudan which has been attributed to the new entity.</p> <p>Nippon Oil purchases Sudanese crude oil primarily because of the quality and environmental requirements of the company's clientele. In the 2008 annual report the Company explained, "Nippon Oil's purchases of Sudanese crude oil are made through international traders and other entities: the Company has never entered into direct contracts with the Sudanese government or Sudan's State-owned oil company. Similarly, we have no exploration or production rights or facilities in Sudan, and have no intention of acquiring any such rights in the foreseeable future."</p> <p>In June 2007, Nippon Oil Chairman Fumiaki Watari stated the company would continue to import crude from Sudan in spite of U.S. sanctions against that country. However, due to increased public pressure, in November 2007 Watari participated in trade ministry hearings to discuss the potential consequences of a ban on Sudan oil imports. He later informed reporters that, "we would have to follow the government's advice, if any, and any diplomatic issues should be discussed among the state governments."</p>	CalPERS initiated engagement with JX Holdings in 2011. Response from the Company is pending.	6,242,400	\$37,146,183
			Category Total:	6,242,400	\$37,146,183

TABLE 3
16 Companies Being Monitored

	<i>Company Name (Domicile)</i>	<i>Summary of Ties to Sudan</i>	<i>Summary of Changes From 2010</i>	<i>Shares Held by CalPERS 10/31/2011</i>	<i>Market Value (\$) of Shares Held by CalPERS 10/31/2011</i>
1	Atlas Copco AB (Sweden)	As of September 2010, Atlas Copco, a manufacturer of compressors, air treatment equipment, construction and loading equipment, mining and drilling equipment, pneumatic and electrical power tools and assembly systems , stated on its Web site that it had an office in Kenya that served clients in Sudan. Atlas Copco reported that it founded and continues to manage the nonprofit organization Water for All, which is drilling and digging for water in countries where clean drinking water is a scarce resource. Sudan was one of the countries that received support from this organization in 2009.	In September 2011, CalPERS had a constructive dialogue with Atlas Copco. Atlas Copco confirmed they do not have any operations or employees in Sudan, or any ties to the Government of Khartoum. In addition, Atlas Copco supports non-profit organization Water for All, which is drilling and digging for water in countries including Sudan where clean drinking water is a scarce resource. CalPERS has concluded that the Company is not subject to the divestment provisions of the Sudan Act.	4,907,390	\$101,353,747
2	Bharat Heavy Electrical Limited (India)	Bharat Heavy Electricals Limited (BHEL) is an India-based power and energy company, 67.7 percent owned by the Indian government. The company's first businesses in Sudan were in the transport industry, providing Sudan Railways with eight mainland locomotives in 2005 and exporting locomotive parts in 2006. The company's subsequent and current operations in Sudan have been power-related. BHEL confirmed for MSCI Group in December 2007 that it was developing a 500-megawatt power plant in Kotsi, Sudan, which is scheduled to supply power to the whole of Sudan. It declined to provide further details on its activities in Sudan. However, Africa Energy Intelligence reported on April 2, 2008, that the cost of the project will be USD \$457 million. The power station is to have transmission lines between Jebel Awlia, Rank and Al Obeid.	CalPERS has no current investment position in Bharat Heavy Electrical Ltd.	0	0
3	Bolloré SA (France)	Bolloré confirmed that it provides logistics services to companies involved in oil operations in southern Sudan as well as to the United Nations for its relief efforts in the area. Bolloré Group's subsidiary, SDV Oilfield, has offices in Khartoum and Port Sudan registered under the name, SDV Transintra Sudan, and over 50 employees. In a letter sent to MSCI on July 23, 2009, a company representative said that SDV	In January 2011, Bolloré confirmed for CalPERS that going forward all subsidiaries logistics services in the oil and gas activities in Sudan will be suspended. In addition, Bolloré issued instructions to its subsidiaries that they may not enter any new oil and gas related activity in	13,070	\$3,025,273

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TABLE 3
16 Companies Being Monitored

	<i>Company Name (Domicile)</i>	<i>Summary of Ties to Sudan</i>	<i>Summary of Changes From 2010</i>	<i>Shares Held by CalPERS 10/31/2011</i>	<i>Market Value (\$) of Shares Held by CalPERS 10/31/2011</i>
		<p>Transintra has no business relationship in the field of logistics concerning supplies or services for the government of Sudan.</p> <p>Bollore's company in Juba (where the Government of South Sudan is based) is called SDV Logistics Sudan, and is not involved in the oil business. According to Bollore's website, its transport division maintains operations in Sudan. However, the company confirmed in the letter sent to MSCI that it is "not involved in any capacity with the oil/mining business in North Sudan".</p>	Sudan. CalPERS has concluded that the Company is not subject to the divestment provisions of the Sudan Act.		
4	KEPCO Plant Services & Engineering Co. Ltd. (Korea)	KEPCO Plant Service & Engineering provides power plant maintenance services. In July 2008, Sudan's Electric Power Agency awarded a USD \$33.8 million contract to a consortium of South Korean companies that included KEPCO Plant Service & Engineering. The contract involved the modernization of a power plant in Khartoum, Sudan, and was expected to be completed by 2010.	KEPCO has confirmed completion of its business operations in Sudan. With this information, CalPERS has concluded that the Company is not subject to the divestment provisions of the Sudan Act.	34,720	\$969,666
5	KLCC Property Holdings (Malaysia)	As of June 2010, KLCC Property Holding Berhad was 51 percent owned by Petronas where there is significant overlap in management between KLCC and Petronas.	While it has been reported that Petronas has ties to business operations in Sudan, there is no evidence to suggest KLCC is operating in the country. With this information, CalPERS has concluded that the Company is not subject to the divestment provisions of the Sudan Act.	236,500	\$240,508
6	KunLun Energy Company (Formerly CNPC Hong Kong) (Hong Kong)	According to its website and public filings, Kunlun Energy (formerly CNPC (Hong Kong) Ltd.) is a publicly traded subsidiary of the state-owned China National Petroleum Corp. (CNPC), which holds a 52.7 percent interest in Kunlun Energy. The Associated Press reported on July 2, 2007 that CNPC signed a 20-year contract in June 2007 for Block 13 in northern Sudan under which it entered into a six-year phase for offshore oil drilling exploration and a 20-year concession for shared oil production.	CalPERS has no current investment position in KunLun Energy.	0	0

TABLE 3
16 Companies Being Monitored

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		<p>China Energy Weekly reported on July 14, 2006, that CNPC had completed an upgrade of the largest oil refinery in Khartoum. CNPC upgraded the capacity of the refinery to 5 million tons at a cost of USD 341 million. CNPC and the Sudan Energy Ministry each hold 50 percent stakes in the refinery, which had an initial capacity of 2.5 million tons when it first went into operation in June 2000. The article also reported that CNPC holds a 40 percent stake in the Greater Nile Consortium, which produces 330,000 barrels of oil per per day from three oil blocks in Sudan. The Greater Nile Petroleum & Oil Corp. operates Blocks 1, 2, 4, 5a and 6 and controls 60 percent of Sudan's oil production. CNPC also owns a 42 percent stake in two blocks in Malut. In addition, CNPC is investing in an oil terminal on Sudan's Red Sea coast and runs a pipeline connecting the Khartoum refinery with the Fula Oilfield, according to the article.</p> <p>On its website, CNPC indicates that it is also exploring in Sudan's Blocks 3 and 7. CNPC has a 41 percent stake in a consortium, Petrodar, which controls the blocks. The partners began production on the blocks in 2005. China Energy Report Weekly reported on September 9, 2005, that CNPC won a 35 percent stake in Sudan's Block 15. The block has two natural gas wells, and Petronas, CNPC and Sudapet will jointly operate the block.</p>			
7	LS Industrial Systems Co. (Korea)	<p>LS Industrial Systems Co., Ltd. manufactures electric power equipment. In July 2008, Sudan's Electric Power Agency awarded a USD \$33.8 million contract to a consortium of South Korean companies led by LS Industrial Systems. The contract involved the modernization of a power plant in Khartoum, Sudan, and was expected to be completed by 2010. LS Industrial Systems had a 54 percent stake in the consortium.</p>	It has been confirmed that the Company has completed its contractual work in Sudan. With this information, CalPERS has concluded that the Company is not subject to the divestment provisions of the Sudan Act.	28,915	\$1,445,489

TABLE 3
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	<i>Company Name (Domicile)</i>	<i>Summary of Ties to Sudan</i>	<i>Summary of Changes From 2010</i>	<i>Shares Held by CalPERS 10/31/2011</i>	<i>Market Value (\$) of Shares Held by CalPERS 10/31/2011</i>
8	MISC (Malaysia)	MISC Berhad is the leading international shipping line of Malaysia. MISC Berhad operates a fleet of over 100 vessels, specializing in the shipping of energy products such as liquefied natural gas and petroleum (Company Website). MISC has a joint venture which provides shipping services to Sudan.	CalPERS has no current investment position in MISC.	0	0
9	Oil & Natural Gas Company (India)	As of January 2011, it is reported that ONGC has assets in both North and South Sudan.	CalPERS has no current investment position in ONGC.	0	0
10	Oil India Ltd. (India)	Oil India Limited is engaged in the exploration, development, production, and transportation of crude oil and natural gas. As of September 2009, Oil India had a 10 percent stake in a 741 km oil pipeline; ONGC Videsh Limited had the remaining 90 percent stake. The pipeline was completed in October 2005 and was given to the Sudanese Ministry of Energy & Mining (MEM) under the Build, Own, Lease, and Transfer (BOLT) basis. According to the company's 2008 Annual Report the consortium has received 7 payment installments from the Sudanese MEM. The company also reported that it had an ongoing overseas presence in Sudan.	Through September 2010, Oil India states that the company is well within the canons of law (read as Sudan Act) and requests CalPERS to stay invested. The criteria presented in the Sudan Act were addressed through a due diligence exercise that was very exhaustive and passed the rigid test of the Regulators upon issuance of Oil India's IPO. After reviewing the September 2010 response from Oil India, CalPERS has concluded that the Company is not subject to the divestment provisions of the Sudan Act.	150,219	\$4,010,056
11	PECD Bhd. (Malaysia)	As of August 2011, PECD Berhad, an investment holding company, provides engineering, procurement, construction, and commissioning (EPCC) services. The company has operations in the Republic of Sudan.	CalPERS has no current investment position in PECD Berhad.	0	0
12	PetroChina (China)	PetroChina is reported to have no operations in Sudan. However, the relationship between PetroChina and CNPC has resulted in significant scrutiny being placed on the role PetroChina could play in CNPC's	CalPERS has no current investment position in PetroChina.	0	0

TABLE 3
16 Companies Being Monitored

	<i>Company Name (Domicile)</i>	<i>Summary of Ties to Sudan</i>	<i>Summary of Changes From 2010</i>	<i>Shares Held by CalPERS 10/31/2011</i>	<i>Market Value (\$) of Shares Held by CalPERS 10/31/2011</i>
		operations in Sudan. Management at CNPC and PetroChina almost completely overlap and frequent asset transfers between the two entities, which often take place at subsidized rates, have made CNPC completely reliant on PetroChina for its financial health.			
13	Petronas (Malaysia)	<p>According to the company's 2010 annual report, Petronas operates in Sudan through its wholly owned subsidiary, Petronas Marketing Sudan Limited (PMSL). The company is involved in marketing and retailing petroleum products and lubricants in Sudan. According to the 2010 annual report, the company expanded its retail network to 78 service stations. Furthermore, the company is engaged in marketing and retailing lubricants. PSML also provides into-plane fueling service at the Khartoum International Airport and the El-Obeid International Airport.</p> <p>In 2010, the company disclosed that it has started production in Sudan's block 3 & 7 of Nahal Base oil field. Reuters also reported in September 2010 that Petronas is working with Sudan's state owned company National Petroleum Company to boost oil recovery in 2020 by one billion barrels. Reuters also added that Petronas holds a 77 percent stake in block 8 of Northern Sudan, which has potential gas reserves of a trillion cubic feet.</p>	CalPERS has no current investment position in Petronas.	0	0
14	Seadrill Limited (Bermuda)	Seadrill is an offshore drilling contractor that provides services including platform drilling, well intervention, and engineering services. In October 2009 Seadrill reported it would be contracting its West Prospero rig to the Red Sea Petroleum Operating Company for a two-well campaign in Block 15 in Sudan. The contract is set for a six month period starting in December 2009. The drilling contract is estimated to be value at USD \$49.9 million. Through July 2010, Seadrill confirms that its first drilling operation started early 2010 with expected completion in 3Q 2010.	Seadrill does not currently have further plans for drilling operations in Sudan and will take CalPERS views into consideration for any potential future operations. Seadrill does not supply services or products to the Sudanese government or its military forces. With this information, CalPERS has concluded that the Company is not subject to the divestment provisions of the Sudan Act.	1,666,327	\$55,630,353

TABLE 3 16 Companies Being Monitored					
	<i>Company Name (Domicile)</i>	<i>Summary of Ties to Sudan</i>	<i>Summary of Changes From 2010</i>	<i>Shares Held by CalPERS 10/31/2011</i>	<i>Market Value (\$) of Shares Held by CalPERS 10/31/2011</i>
15	Sudan Telecom (Sudan)	Sudatel is a telecommunications and Internet service provider in the Sudan. The company is responsible for the construction and maintenance of Sudan's telecom infrastructure. Sudatel is more than 60% owned by the Sudanese government; the remainder being owned by private interests.	CalPERS has no current investment position in Sudan Telecom.	0	0
16	Wartsila OYJ (Finland)	In December 2007, Wartsila told MSCI Group that its activities in Sudan are conducted in "strict compliance with applicable international and national laws." Wartsila acknowledged to MSCI Group on Sept. 3, 2007, that it had supplied "high-efficiency power plants" to Sudan. It said, however, that it has no assets in Sudan and that its business there "has always been very small considering the total business activities Wartsila has." It added, "We have no plans to become a large player in the country nor do we have any intention to expand beyond the type of business we have earlier been in." None of its sales in Sudan have been to governmental entities. It continues to maintain a representative office in Khartoum, Intercontinental Trading & Engineering (ITE). It also continued to post a press release on its website announcing that the company won an order to build an oil-fired power plant in Sudan.	In correspondence with Wartsila, the company confirmed that it currently has no assets in Sudan and it will cease to expand its business operations in Sudan. With this information, CalPERS has concluded that the Company is not subject to the divestment provisions of the Sudan Act.	686,519	\$21,133,267
			Category Total:	7,723,660	\$187,808,359



Michael C. Schlachter, CFA
Managing Director & Principal
March 28, 2011

Mr. Eric Baggesen
Senior Investment Officer for Global Equities
California Public Employees' Retirement System
400 P Street
Sacramento, CA 95814

Re: Divestment Analysis – Sudan and Iran

Dear Eric,

This document responds to your request for an update of the our report detailing the impact of the contemplated divestment of Sudan and Iran-related securities.

Bear in mind that this paper does not pass judgment or comment on the political, social, health, or moral merits of any past, present, or contemplated future divestment activities, but simply calculates or estimates the gain or loss to the CalPERS investment portfolio of such activities.

Summary of Findings

In the pages that follow, we present detailed data and / or calculations to estimate the projected costs of the divestment of Sudan and Iran-related securities. This section presents a simplified summary of our results.

Projected Transactions Costs of Iran and Sudan Divestment

- High Estimate: -\$1,680,000
- Low Estimate: -\$420,000

Projected Annual Impact of Iran and Sudan Divestment / Exclusion (Assuming Optimized Reinvestment)

- 1 in 5 Years: ± \$769,000
- 1 in 10 Years: ± \$987,000
- 1 in 20 Years: ± \$1,176,000

Proposed Iran and Sudan Divestment

Wilshire calculated the costs and tracking error associated with the proposed divestment of Iran and Sudan-related securities. Based on work previously performed by Staff, 8 securities in 2010 were identified as having substantial Iran-related and/or Sudan-related business activities. One security on the list was not in the unconstrained benchmark and two were not in the constrained benchmark.

Using index data as of December 31, 2010, Wilshire performed a variety of calculations, including the estimated transactions costs of divestment and reinvestment of proceeds, and the possible tracking error (excess risk) that may occur from excluding prohibited securities. All calculations were performed using Wilshire's Atlas GR6 global risk model, a software system that is generally recognized as an industry-leading risk calculation package.

FTSE currently creates for CalPERS a custom global equity benchmark that blends a custom FTSE index for non-US securities with a custom Wilshire 2500 index for US equities. This benchmark was used as a proxy for the complete global equity opportunity set.

We then calculated the fraction of the custom global index comprised by these 8 securities.

Analysis of Results – Global Equity Portfolio

We calculated that the 5 prohibited securities that were included in the current constrained benchmark comprise approximately 0.07% of the CalPERS benchmark (\$84 MM of a \$120B global benchmark).

Our analysis calculated that the projected tracking error of the global constrained (ex-tobacco, ex-KLD principles) benchmark versus the normal (unconstrained) FTSE index is 28.2 basis points. If the 8 securities on the Iran and Sudan lists are removed from the constrained portfolio, the projected tracking error versus the unconstrained benchmark increases 0.2 basis points to 28.4 basis points. We also calculated that the projected tracking error of the constrained portfolio less the 8 securities versus the constrained portfolio is 1.5 basis points.

The 0.2bp of incremental projected tracking error versus the unconstrained benchmark or the 1.5bp of projected tracking error for the constrained benchmark versus itself less divested securities are within the margin of error for the ordinary management of an index fund and do not pose a significant risk to the portfolio if they are divested.

In the above analyses, we assumed that any proceeds from divested securities were reinvested pro-rata in the remaining securities in the benchmark. The calculation of 1.5 basis points of incremental tracking error means that in approximately 2 out of 3 years, the performance of the portfolio relative to the benchmark will not vary by greater than 0.015% solely as a result of these exclusions. On a base of \$120B, the risk to the

portfolio is expected to lead to a performance discrepancy versus a benchmark containing the 8 securities of greater than:

- \$23.1 million 1 out of every 5 years (1.282 standard deviations)
- \$29.6 million 1 out of every 10 years (1.645 standard deviations)
- \$35.3 million 1 out of every 20 years (1.960 standard deviations)

Analysis of Results – Non-US Equity Portfolio

We also were asked to re-optimize the portfolio, reinvesting the proceeds from the divested securities into other securities that are sufficiently similar to the divested securities that the purchases will decrease the impact of the divestment. Due to the limitations of the optimization software (there are approximately 900 securities more in the unconstrained benchmark than the optimizer can handle), we were not able to run a full optimization on the entire global portfolio. As a result, we split the Global portfolio into US and non-US components and recalculated the divestment impacts and optimization results on the non-US portion of the portfolio.

For the non-US portfolio, if the divested securities are reinvested pro-rata back into the portfolio, we found that the projected tracking error of the non-US constrained (ex-tobacco, ex-KLD principles) benchmark versus the normal (unconstrained) FTSE non-US index is 45.8 basis points. If the 8 securities on the Iran and Sudan lists are removed from the constrained portfolio, the projected tracking error versus the unconstrained benchmark remains unchanged at 45.8 basis points, indicating that there is no incremental tracking error versus the unconstrained benchmark resulting from divestment of these securities.

We also calculated that the projected tracking error of the constrained benchmark versus the constrained benchmark less the 8 divested securities is 2.7 basis points, indicating that there is a slight contribution to risk from divestment, but that risk is still within the margin of error in the ordinary operation of an index fund. The calculation of 2.7 basis points of incremental tracking error means that in approximately 2 out of 3 years, the performance of the portfolio relative to the benchmark will not vary by greater than 0.027% solely as a result of these exclusions. On a base of \$60B, the risk to the portfolio is expected to lead to a performance discrepancy versus a benchmark containing the 8 securities of greater than:

- \$20.8 million 1 out of every 5 years (1.282 standard deviations)
- \$26.6 million 1 out of every 10 years (1.645 standard deviations)
- \$31.8 million 1 out of every 20 years (1.960 standard deviations)

We then re-optimized the portfolio to reinvest the proceeds from the 8 divested securities in such a manner as to reduce incremental tracking error as much as possible, generally by replacing the divested securities with others that have very similar characteristics. We found that the projected tracking error of the optimized non-US

constrained (ex-tobacco, ex-KLD principles) benchmark versus the normal (unconstrained) FTSE non-US index is 16.2 basis points. If the 8 securities on the Iran and Sudan lists are removed from the constrained portfolio and the constrained portfolio is re-optimized to minimize the absence of all divested and constrained securities, the projected tracking error versus the unconstrained benchmark remains virtually unchanged at 16.3 basis points, indicating that there is virtually no incremental tracking error versus the unconstrained benchmark resulting from divestment of these securities in a re-optimized portfolio.

The 0.1 basis point increase in tracking error for the constrained benchmark versus the constrained benchmark less the 8 divested securities means that in approximately 2 out of 3 years, the performance of the portfolio relative to the benchmark will not vary by greater than 0.001% solely as a result of these exclusions. On a base of \$60B, the risk to the portfolio is expected to lead to a performance discrepancy versus a benchmark containing the 8 securities of greater than:

- \$769,000 in 1 out of every 5 years (1.282 standard deviations)
- \$987,000 in 1 out of every 10 years (1.645 standard deviations)
- \$1,176,000 in 1 out of every 20 years (1.960 standard deviations)

In allowing for optimal reinvestment, the above optimization achieved a 2.6 basis-point reduction in expected tracking error versus the proportional reinvestment case (from 0.027% to 0.001% TE). This appears to be the result of the large number of securities in the custom benchmark (9,000+) and the relatively small exposure (0.07%) to restricted securities.

In order to optimize the portfolio as described above, the following trades are required:

- Sales: 7 securities totaling \$84 million (7 basis points of \$120BN)
- Purchases: various securities totaling \$84 million to reinvest proceeds
- Total: \$168 million worth of transactions

At the levels of assumed total transaction costs specified below (commission, spread, market impact), the expected cost of the required transactions would be as listed (note: the 0.50% cost estimate is likely the most representative of the average cost for purchases and sales, as the cost to purchase is expected to be near the 0.25% level, while the cost to sell restricted securities is more likely to be at the higher 1% level. If liquidations were required to occur quickly – i.e. in a single day – the costs of sales would likely be higher than 1%, making the overall roundtrip cost estimate more likely to migrate towards the 1% figures shown below):

- At 0.25% cost (conservative for non-US securities), the total expected cost would be \$420,000.

- At 0.50% cost (moderate for non-US securities), the total expected cost would be \$840,000.
- At 1.00% cost (realistic for illiquid non-US securities), the total expected cost would be \$1.68 million.

Conclusion

The generally accepted academic argument is that limiting the opportunity set for investments has a deleterious impact on performance over long periods of time. Over a market cycle, a portfolio that can choose from all 500 stocks in the S&P 500 should outperform one that can only select from 450 stocks. The analyses contained in this report generally confirm the argument that divested portfolios present more risk of over or underperformance versus a benchmark than does an all-inclusive index fund..

Any investor who wishes to divest from certain securities or exclude certain securities should therefore weigh the political, social, or moral benefits of such exclusions against the possible cost of owning a suboptimal portfolio.

If you have any additional questions, please do not hesitate to contact me.

Sincerely,



Michael C. Schlachter, CFA

Appendix A: Definitions

Definitions

“Active business operations” – A company engaged in business operations that provide revenue to the government of Sudan or a company engaged in oil-related activities.

“Authorized business operations” – A United States company that is authorized by the federal government to have business operations in Sudan.

“Board” – The Board of Administration of the Public Employees’ Retirement System or the Teachers’ Retirement Board of the State Teacher’ Retirement System, as applicable.

“Business operations” – Maintaining, selling, or leasing equipment, facilities, personnel, or any other apparatus of business or commerce in Sudan, including the ownership or possession of real or personal property located in Sudan.

“Oil-related activities” – The export of oil, extracting or producing oil, exploration for oil, or the construction or maintenance of a pipeline, refinery, or other oil field infrastructure.

“Research firm” – A reputable, neutral third-party research firm.

“Substantial action” – A boycott of the government of Sudan, curtailing business in Sudan or selling company assets, equipment or real and personal property located in Sudan, or undertaking significant humanitarian efforts in the eastern, southern, or western regions of Sudan.

Appendix B:

Requirements of the Sudan Act

The implementation steps and requirements specified within the Sudan Act are:

1. Contracting with a research firm to identify companies that have business operations in Sudan.
2. Identification by the research firm by March 30, 2007 of companies with activities in the specified areas of oil-related, energy, power-related business that have not taken substantial action, or, companies that supply military equipment within the Sudan.
3. The board shall contact other institutional investors that invest in companies with business operations in Sudan.
4. By March 30, 2007 the board shall determine if the companies identified meet the criteria of the Sudan Act and should such companies be contained in external, actively managed commingled funds, request the managers of those funds remove the companies or create a fund or account devoid of those companies by June 30, 2007.
5. Notification to such companies that their activities may make them subject to divestment unless they take “substantial action” within 90 days.
6. Determine which companies have not taken substantial action or made significant progress toward substantial action within the time period.
7. Monitor and review companies in 90 day increments regarding their making sufficient progress toward “substantial action”.
8. Determining that a company that is not taking or making significant progress toward substantial action in any 90 day period is subject to “divestment” and making no further investments into such company.
9. Fiduciary analysis to determine that actions to be taken are consistent with the boards’ fiduciary responsibilities as established in the “California Constitution, article 16, section 17”.
10. Liquidation within 18 months of investments determined to be subject to “divestment”.
11. Report annually to the California Legislature regarding the status of CalPERS compliance with the Sudan Act.